

IN THE CLAIMS

~~Please cancel claims 19-38. Please add new claims 39-66.~~ For the convenience of the Examiner, all pending claims are set forth below.

39. (New) An access device comprising:

a simple network management protocol (SNMP) agent, wherein the SNMP agent has direct access to configuration data stored in said access device;

a combined hypertext transport protocol (HTTP) server and SNMP manager, wherein the combined HTTP server and SNMP manager only accesses said configuration data by communicating with said SNMP agent; and

a combined text-interface generator and HTTP client, wherein the combined text-interface generator and HTTP client only accesses said configuration data by requesting said combined HTTP server and SNMP manager to communicate with said SNMP agent, so that all safety mechanisms are built into the SNMP agent to enhance security.

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40. (New) The access device of claim 39, wherein:

the combined HTTP server and SNMP manager generates hypertext mark-up language (HTML) documents that include anchors that contain identifiers for management information base (MIB) objects; and

the combined text-interface generator and HTTP client transmits to the combined HTTP server and SNMP manager messages that contain identifiers for MIB objects in response to input received from a user.

41. (New) A method comprising:

receiving from a hypertext transport protocol (HTTP) client a message that identifies a management information base (MIB) item;

reading MIB information to determine a type of said MIB item;
requesting a current value from a simple network management protocol (SNMP) agent for said MIB item;
automatically generating a hypertext mark-up language (HTML) page which, when decoded by the HTTP client, causes the HTTP client to generate a display that indicates the current value for said MIB item; and
transmitting the HTML page to the HTTP client.

42. (New) The method of claim 41, wherein:

receiving from an HTTP client a message that identifies a MIB item includes receiving a message that identifies a row in a MIB table;
reading said MIB information to determine a type of said MIB item includes reading said MIB information to determine the type for each MIB variable in the row;
requesting a current value from an SNMP agent for said MIB item includes requesting current values for each MIB variable in the row;
automatically generating an HTML page includes generating an HTML page which, when decoded by the HTTP client, causes the HTTP client to generate a display that indicates the current values for at least one MIB variable in the row.

43. (New) The method of claim 41, further comprising reading from a string of text arguments of the message that identifies the MIB item.

44. (New) The method of claim 43, wherein automatically generating said HTML page includes replacing text from a template HTML page with text that is based on said arguments.

45. (New) The method of claim 43, wherein automatically generating said HTML page includes inserting into an anchor of said HTML page text that is based on said arguments.

46. (New) The method of claim 41, wherein automatically generating said HTML page includes generating an anchor in said HTML page that includes a command.

47. (New) The method of claim 46, further comprising:

receiving the command from the HTTP client when a user selects a hypertext link associated with the anchor; and

transmitting a request for an SNMP operation to the SNMP agent in response to receiving the command from the HTTP client.

48. (New) The method of claim 47, wherein the anchor further includes an identifier of a second MIB item and a value.

49. (New) The method of claim 48, wherein transmitting a request for an SNMP operation to the SNMP agent includes transmitting a request for the variable corresponding to the second MIB item to be set to said value.

50. (New) A network device comprising:

a simple network management protocol (SNMP) agent, wherein the SNMP agent has direct access to configuration data stored in said access device;

means for combining hypertext transport protocol (HTTP) server and SNMP manager, wherein the means for combining HTTP server and SNMP manager only accesses said configuration data by communicating with said SNMP agent; and

means for combining text-interface generator and HTTP client, wherein the means for combining text-interface generator and HTTP client only accesses said configuration data by requesting the means for combining HTTP server and SNMP manager to communicate with said SNMP agent, so that all safety mechanisms are built into the SNMP agent to enhance security.

51. (New) The network device of claim 50, wherein:

the means for combining HTTP server and SNMP manager generates hypertext mark-up language (HTML) documents that include anchors that contain identifiers for management information base (MIB) objects; and

the means for combining text-interface generator and HTTP client transmits to the means for combining HTTP server and SNMP manager messages that contain identifiers for MIB objects in response to input received from a user.

52. (New) The network device of claim 50, further comprising a user interface, said interface being optimized for speed and navigability.

53. (New) The network device of claim 52, wherein the user interface is a duplicate in look-and-feel of a text menu system.

54. (New) An access device comprising:

means for receiving from an hypertext transport protocol (HTTP) client a message that identifies a management information base (MIB) item;

means for reading MIB information to determine a type of said MIB item;

means for requesting a current value from a simple network management protocol (SNMP) agent for said MIB item;

means for automatically generating a hypertext mark-up language (HTML) page which, when decoded by the HTTP client, causes the HTTP client to generate a display that indicates the current value for said MIB item; and

means for transmitting the HTML page to the HTTP client.

55. (New) The access device of claim 54, wherein:

the means for receiving from an HTTP client a message that identifies a MIB item includes means for receiving a message that identifies a row in a MIB table;

the means for reading said MIB information to determine a type of said MIB item includes means for reading said MIB information to determine the type for each MIB variable in the row;

the means for requesting a current value from an SNMP agent for said MIB item includes means for requesting current values for each MIB variable in the row;

the means for automatically generating an HTML page includes means for generating an HTML page which, when decoded by the HTTP client, causes the

HTTP client to generate a display that indicates the current values for at least one MIB variable in the row.

56. (New) The access device of claim 54, further comprising means for reading from a string of text arguments of the message that identifies the MIB item.

57. (New) The access device of claim 56, wherein the means for automatically generating said HTML page includes means for replacing text from a template HTML page with text that is based on said arguments.

58. (New) The access device of claim 56, wherein the means for automatically generating said HTML page includes means for inserting into an anchor of said HTML page text that is based on said arguments.

59. (New) The access device of claim 54, wherein the means for automatically generating said HTML page includes means for generating an anchor in said HTML page that includes a command.

60. (New) The access device of claim 59, further comprising:

means for receiving the command from the HTTP client when a user selects a hypertext link associated with the anchor; and

means for transmitting a request for an SNMP operation to the SNMP agent in response to receiving the command from the HTTP client.

61. (New) The access device of claim 60, wherein the anchor further includes an identifier of a second MIB item and a value.

62. (New) The access device of claim 61, wherein the means for transmitting a request to the SNMP agent includes means for transmitting a request for the variable corresponding to the second MIB item to be set to said value.

63. (New) A computer readable medium containing executable instructions which, when executed in a processing system, causes the system to perform a method, the method comprising:

providing a simple network management protocol (SNMP) agent, wherein the SNMP agent has direct access to configuration data stored in said access device;

combining hypertext transport protocol (HTTP) server and SNMP manager, wherein the combined HTTP server and SNMP manager only accesses said configuration data by communicating with said SNMP agent; and

combining text-interface generator and HTTP client, wherein the combined text-interface generator and HTTP client only accesses said configuration data by requesting said combined HTTP server and SNMP manager to communicate with said SNMP agent, so that all safety mechanisms are built into the SNMP agent to enhance security.

64. (New) The computer readable medium of claim 63 wherein:

the combined HTTP server and SNMP manager generates hypertext mark-up language (HTML) documents that include anchors that contain identifiers for management information base (MIB) objects; and

the combined text-interface generator and HTTP client transmits to the combined HTTP server and SNMP manager messages that contain identifiers for MIB objects in response to input received from a user.

C (65. (New) The computer readable medium of claim 63, wherein the method further comprises providing a user interface, said interface being optimized for speed and navigability.

66. (New) The computer readable medium of claim 65, wherein the user interface is a duplicate in look-and-feel of a text menu system.